6GJ5A

Beam Power Tube

NOVAR TYPE

For Horizontal-Deflection-Amplifier Service in Black-and-White TV Receivers

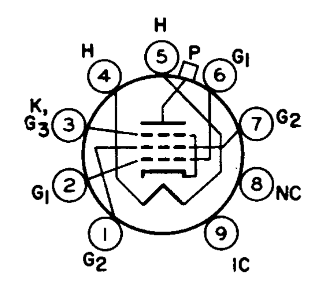
Electrical:

Heater Ratings and Characteristics:		
Voltage (AC or DC)	6.3 ± 0.6	volts
Current at heater volts = 6.3	1.200	amp
Peak heater-cathode voltage:		
Heater negative with respect to cathode	200 max.	volts
Heater positive with respect to cathode	200 max.[a]	volts
Direct Interelectrode Capacitances (Approx.):[b]		
Grid No.1 to plate	0.26	pf
Input: G1 to (K,G3,G2,H)	15.0	pf
Output: P to (K,G3,G2,H)	6.5	pf

Mechanical:

Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	3.505"
Seated Length	2.875" to 3.125"
Diameter	1.438" to 1.562"
Dimensional Outline	See *General Section*
Bulb	T12
Cap	Skirted Miniature (JEDEC C1-2 or C1-3)
Base	Large-Button Novar 9-Pin with Exhaust Tip (JEDEC No.E9-88)
Basing Designation for BOTTOM VIEW	9QK

Pin 1 - Grid No.2
Pin 2 - Grid No.1
Pin 3 - Cathode, Grid No.3
Pin 4 - Heater
Pin 5 - Heater
Pin 6 - Grid No.1
Pin 7 - Grid No.2
Pin 8 - No Internal Connection
Pin 9 - Do Not Use
Cap - Plate



Characteristics, Class A_1 Amplifier:

	Triode Connection	*Pentode Connection*		
Plate Voltage	150	60	250	volts
Grid-No.2 Voltage	150	150	150	volts
Grid-No.1 Voltage	-22.5	0	-22.5	volts
Mu-factor, Grid No.2 to Grid No.1	4.4	-	-	
Plate Resistance (Approx.)	-	-	15000	ohms
Transconductance	-	-	7100	µmhos

	Triode Connection	Pentode Connection		
Plate Current	–	390[c]	70	ma
Grid-No. 2 Current	–	32[c]	2.1	ma
Grid-No. 1 Voltage (Approx.)				
for plate ma = 1.	–	–	-42	volts

HORIZONTAL-DEFLECTION AMPLIFIER

Maximum Ratings, *Design-Maximum Values:*

For operation in a 525-line, 30-frame system[d]

DC Plate-Supply Voltage	770	max.	volts
Peak Positive-Pulse Plate Voltage[e]. . . .	6500	max.	volts
Peak Negative-Pulse Plate Voltage	1500	max.	volts
DC Grid-No. 2 (Screen-Grid) Voltage. . . .	220	max.	volts
DC Grid-No. 1 (Control-Grid) Voltage . . .	-55	max.	volts
Peak Negative-Pulse Grid-No. 1 Voltage . .	330	max.	volts
Cathode Current:			
Peak.	550	max.	ma
Average	175	max.	ma
Grid-No. 2 Input	3.5	max.	watts
Plate Dissipation[f].	17.5	max.	watts
Bulb Temperature (At hottest point on bulb surface).	240	max.	°C

Maximum Circuit Values:

Grid-No. 1-Circuit Resistance:			
For grid resistor-bias operation. . . .	1	max.	megohm

[a] The dc component must not exceed 100 volts.

[b] Without external shield.

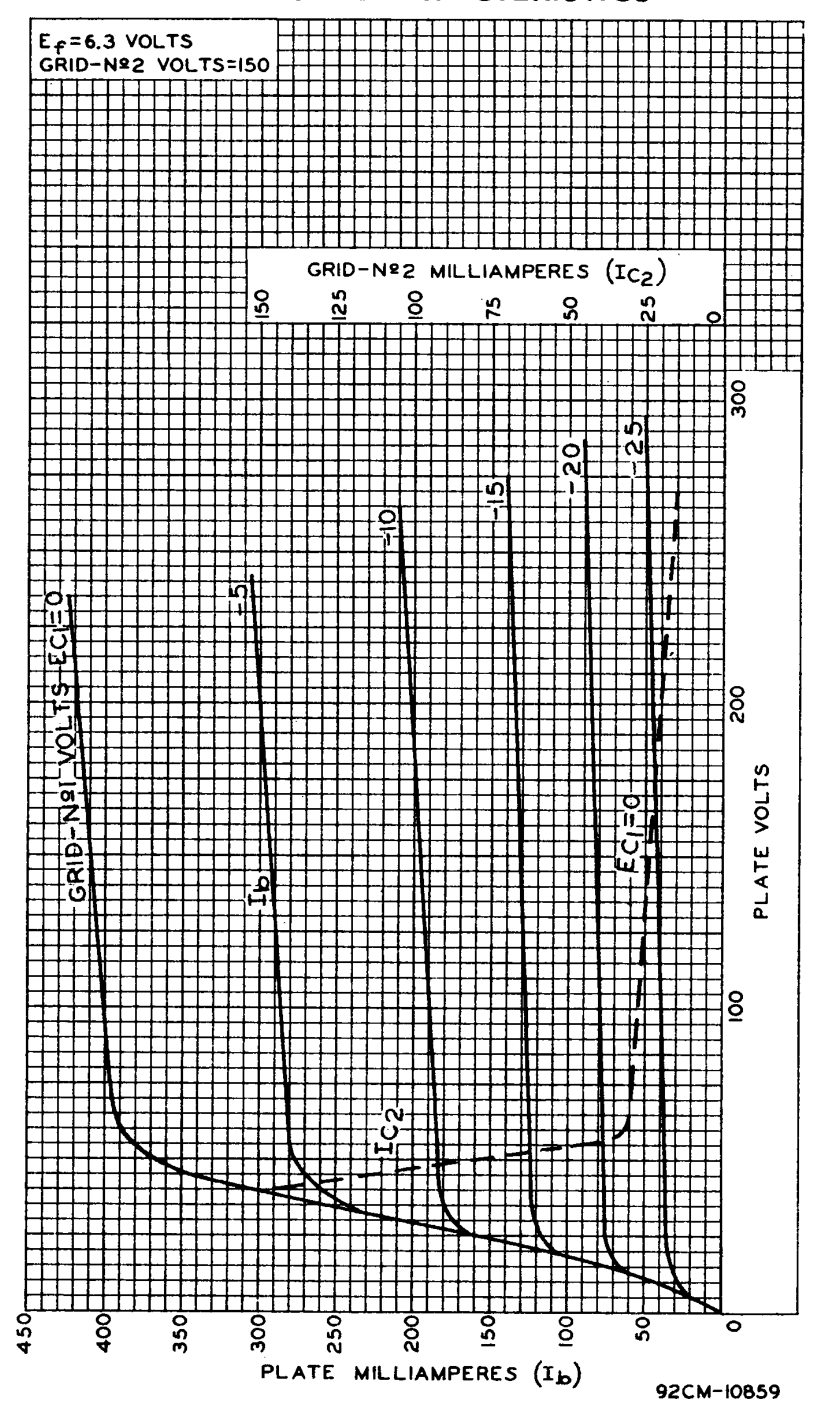
[c] This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.

[d] As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

[e] This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

[f] An adequate bias resistor or other means is required to protect the tube in the absence of excitation.

AVERAGE CHARACTERISTICS



92CM-10859